AUTHORIZING THE USE OF THE INCOMPLETED SUB-MARINE "ULUA" AS A TARGET FOR EXPLOSIVE TESTS

SEPTEMBER 13, 1951.—Ordered to be printed

Mr. Saltonstall, from the Committee on Armed Services, submitted the following

REPORT

[To accompany S. 1994]

The Committee on Armed Services, to whom was referred the bill (S. 1994) to authorize the use of the incompleted submarine *Ulua* as a target for explosive tests, and for other purposes, having considered the same, report favorably thereon with an amendment and recommend that the bill do pass.

AMENDMENT TO THE BILL

The bill is amended as follows:

On page 2, lines 2 through 5, strike all after the word "Ulua" where it appears the second time and insert the following:

and make such repairs as will equip the Ulua for further tests and experimentation, or dispose of her in accordance with other provisions of law.

PURPOSE OF THE BILL

This bill would authorize the Navy Department to use the hull of the *Ulua* (SS-428) as a target for explosive tests.

EXPLANATION OF THE BILL

The Second Supplemental Surplus Appropriation Rescission Act, 1946, contained a proviso which required the Navy Department to complete any vessel whose percentage of construction on March 1, 1946, exceeded 20 percent. The *Ulua* was more than 20 percent complete on that date and the Department is therefore required to complete her. However, work on the *Ulua* was suspended in August 1945 and the ship today is approximately 50 percent complete.

The Bureau of Ships recently awarded to the Electric Boat Co. a contract for the construction of an atomic-powered submarine. This type of vessel necessarily involves structures and components which are new to naval architecture as well as to the naval service. In common with all other submarine equipment, the design of the atomic-powered vessel must be capable of resisting the shocks to be encountered under service and combat conditions. However, no data are available on the shock resistance of types of equipment developed since the termination of hostilities of World War II. The tests proposed on the *Ulua* are, to that extent, directly related to the construction of an atomic-powered submarine.

It is proposed to install a dummy atomic power plant in the hull of the *Ulua*, submerge the vessel and attack it with depth charges. In no other way is it possible to obtain reliable data on the shock resistance of this newer equipment.

The Navy Department intends to conduct other tests on the *Ulua* in addition to those seeking data of value in the construction of the atomic-powered submarine. These tests will develop design data on the resistance of submarine hulls as well as data on the shock resistance of certain items of submarine equipment.

In the program of tests in which the *Ulua* will participate the Navy Department contemplates making every effort to obtain the maximum shock data without sinking the hull. There is, however, the possibility that the hull might be sunk either through accident or through unavoidable miscalculations. Navy Department witnesses stated that preparation had been made for this possibility by the establishment of salvage fittings on the hull, and by the modification of the ballasting system to permit its control by compressed air from the surface.

REASON FOR THE AMENDMENT

The committee amended the bill in such a manner as will require further action by the Congress if the hull is to be utilized for other than experimental purposes.

RECOMMENDATIONS OF THE DEPARTMENT

The Department of Defense recommends the bill, as is shown by the following letter which is hereby made a part of this report. The Bureau of the Budget interposes no objection.

> Assistant Secretary of Defense, Washington 25, D. C., July 31, 1951.

Hon Richard B. Russell, Chairman, Committee on Armed Services, United States Senate.

Dear Mr. Chairman: There is forwarded herewith a draft of proposed legislation, to authorize the use of the submarine *Ulua* (SS-428) as a target for explosive tests, and for other purposes.

This proposal is a part of the Department of Defense legislative program for 1951 and it has been approved by the Bureau of the Budget. The Department of Defense recommends that it be enacted by the Congress

Defense recommends that it be enacted by the Congress.

Purpose of the legislation: The purpose of the proposed legislation is to authorize the Secretary of the Navy to employ the incompleted submarine Ulua (SS-428)

as a target for underwater explosion tests. The proposed tests have become essential as a matter of the highest priority in connection with the ship-construction program of the Department of the Navy. In particular, research data are needed as to shock resistance of new type equipment prior to awards of contracts for this equipment which will be installed in new type construction. Further details which are more fully explanatory as to the urgent need for this legislation with regard to particular new type equipment have been classified in the interests of national security but will be outlined by representatives of the Navy Department at hearings before the committees of the Congress in executive session.

Under the provisions of the Second Supplemental Surplus Appropriation Rescission Act, 1946, the Department of the Navy is legally required to complete the submarine *Ulua* (SS-428). The proposed legislation is necessary therefore to authorize the use of the *Ulua* as a target notwithstanding the provisions of that act

Legislative references: None. Cost and budget data: No accurate estimate of the cost of the proposed tests can be made. It is considered, however, the data to be obtained from the tests will result in monetary savings as well as a saving of time and possibly lives which will far outweigh the cost of conducting the tests. Sincerely,

DANIEL K. EDWARDS.